



Aviation Investigation Final Report

Location:	Peach Springs, Arizona	Accident Number:	GAA16CA450
Date & Time:	August 24, 2016, 13:45 Local	Registration:	N839PA
Aircraft:	Airbus AS350	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot reported that as the helicopter was in a hover and backed off of the landing pad, the vertical stabilizer impacted rising terrain. The pilot further reported that he was able to land back on the landing pad 30 feet away with no further incident.

A post examination of the helicopter revealed that the rear vertical stabilizer had received substantial damage.

The pilot reported that there were no pre impact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain clearance from terrain while hover taxiing backward, resulting in the tail striking terrain.

Findings

Personnel issues	Monitoring environment - Pilot
Environmental issues	Sloped/uneven terrain - Effect on operation
Aircraft	Altitude - Not attained/maintained

Factual Information

History of Flight

Maneuvering-hover	Miscellaneous/other (Defining event)
Maneuvering-hover	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	33, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	January 25, 2016
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 30, 2016
Flight Time:	(Estimated) 2268 hours (Total, all aircraft), 271 hours (Total, this make and model), 2164 hours (Pilot In Command, all aircraft), 221 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Airbus	Registration:	N839PA
Model/Series:	AS350 B3	Aircraft Category:	Helicopter
Year of Manufacture:	2013	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7675
Landing Gear Type:	High skid	Seats:	7
Date/Type of Last Inspection:	August 11, 2016 100 hour	Certified Max Gross Wt.:	5225 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	2903.8 Hrs	Engine Manufacturer:	Turbomeca
ELT:	Installed, not activated	Engine Model/Series:	Arriel 2d
Registered Owner:	Monacrh Enterprises Inc.	Rated Power:	951 Horsepower
Operator:	Papillon Airways Inc.	Operating Certificate(s) Held:	Rotorcraft external load (133), On-demand air taxi (135), Commercial air tour (136), Agricultural aircraft (137)
Operator Does Business As:	Papillon Grand Canyon Helicopters	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KIGM,3420 ft msl	Distance from Accident Site:	44 Nautical Miles
Observation Time:	20:51 Local	Direction from Accident Site:	187°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 18 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	33°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Peach Springs, AZ (1G4)	Type of Flight Plan Filed:	Company VFR
Destination:	Peach Springs, AZ (1G4)	Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	GRAND CANYON WEST 1G4	Runway Surface Type:	Concrete;Gravel
Airport Elevation:	4816 ft msl	Runway Surface Condition:	Dry;Rough
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.986667,-113.817497(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Charlie W Bierman; FAA; Las Vegas, NV Philippe Mauviot; Bureau d'Enquêtes et d'Analyses Seth Buttner; Airbus Helicopters (Advisor); Grand Prairie, TX
Original Publish Date:	December 5, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93895

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